MEDICAL CONTROL GUIDELINE: VENTRICULAR ASSIST DEVICE

PRINCIPLES:

1. A Ventricular Assist Device (VAD) is an implanted device that is used to partially or completely replace the function of a failing heart. VADs are used as a bridge to transplant or as a destination therapy for those who are not transplant candidates.

2. All VAD patients have a VAD Coordinator who is available 24 hours a day and will give direction on managing the VAD machine. Contact information for the VAD Coordinator may be located on the VAD controller (sticker on the device), refrigerator, medical-alert bracelet or on a card in the patient's wallet.

3. The patient's assessment, treatment and presentation will depend on the type of VAD. Pulse and blood pressure may or may not be palpable. If a pulse is palpable, it may not correspond with the heart rate on the monitor. The patient's underlying rhythm only requires treatment if the patient is symptomatic.

4. VADs may have back up hand pumps for use if the machine stops working.

5. The patient and family members receive extensive training on their specific VAD and should be utilized in the care of the VAD patient.

6. Many VAD patients are on anticoagulants and prone to bleeding.

7. VADs are preload dependent; therefore, consider administering fluids early, treat arrhythmias that affect preload (e.g., SVT, VT/VF) and avoid the use of nitrates.

8. All VAD patients can be defibrillated and cardioverted, if indicated. VAD patients may have an Implanted Cardioverter Defibrillator (ICD) or a Pacemaker/ICD. If defibrillation or cardioversion is necessary, move the controller as far away from the electrical therapy as possible. DO NOT disconnect the system controller from the percutaneous lead (driveline) or stop the pump prior to delivering the shock.

9. Chest compressions may dislodge the internal VAD tubes from the heart, causing the patient to bleed into the thoracic and/or abdominal cavities.

10. Make sure all equipment is safely secured prior to transport to ensure that the driveline is not pulled or cut during transport. Spinal immobilization and/or splinting may be modified to protect the integrity of the VAD equipment.

GUIDELINES:

1. Call the appropriate VAD Coordinator. Most VAD patients meet base contact criteria (Ref. No. 808) and/or if additional orders are required, contact the base hospital.

2. Utilize other clinical parameters for patient assessment (e.g., skin signs, level of consciousness and general appearance) because VAD patients may or may not have a

blood pressure and/or palpable pulse. Pulse oximetry may be inaccurate. Sidestream or mainstream capnography will read accurately and can provide valuable information on the patient's perfusion status.

3. Treat VAD patients by the appropriate treatment guideline or protocol based on the patient's assessment and findings.

4. Attempt to locate a standardized Patient Designated Directive and/or a POLST. Many VAD patients have made end-of-life care decisions.

5. DO NOT perform chest compressions on VAD patients, even if unconscious and cardiopulmonary arrest is suspected. Contact the VAD Coordinator for further information.

6. When a VAD patient is experiencing signs and symptoms related to the VAD, every effort should be made to transport the patient to a VAD hospital. Allow the family member or care giver to ride with the patient if treatment and space permit.